



A DECADE OF DEFIANCE AND DECEPTION

# A BRIEF STUDY

MSgt Anil Lund

UNCLASSIFIED

# IRAQ



## IRAQ FACTS

**Population:** 22 million

**Capital:** Baghdad

**Major languages:** Arabic, Kurdish

**Major religion:** Islam

**Life expectancy:** 66 years (men), 68 years (women)

**Monetary unit:** 1 Iraqi dinar = 1,000 fils

**Main exports:** Crude oil

**Average annual income:** US \$593

**Internet domain:** .iq

**International dialing code:** 964



# Timeline - IRAQ

- **1920** 25 April - Iraq is placed under British mandate.
- **1921** 23 August - Faysal, son of Hussein Bin Ali, the Sharif of Mecca, is crowned Iraq's first king.
- **1932** 3 October - Iraq becomes an independent state.
- **1958** 14 July - The monarchy is overthrown in a military coup led by Brig Abd-al-Karim Qasim and Col Abd-al-Salam Muhammad Arif. Iraq is declared a republic and Qasim becomes prime minister.
- **1963** 8 February - Qasim is ousted in a coup led by the Arab Socialist Ba'th Party (ASBP). Arif becomes president.
- **1963** 18 November - The Ba'thist government is overthrown by Arif and a group of officers.
- **1966** 17 April - After Arif is killed in a helicopter crash on 13 April, his elder brother, Maj-Gen Abd-al-Rahman Muhammad Arif, succeeds him as president.
- **1968** 17 July - A Ba'thist led-coup ousts Arif and Gen Ahmad Hasan al-Bakr becomes president.



# Timeline - IRAQ

- **1970** 11 March - The Revolution Command Council (RCC) and Mullah Mustafa Barzani, leader of the Kurdistan Democratic Party (KDP), sign a peace agreement.
- **1972** - A 15-year Treaty of Friendship and Cooperation is signed between Iraq and the Soviet Union.
- **Petroleum Firm Nationalized**
- **1972** - Iraq nationalizes the Iraq Petroleum Company (IPC).
- **1974** - In implementation of the 1970 agreement, Iraq grants limited autonomy to the Kurds but the KDP rejects it.
- **1975 March** - At a meeting of the Organization of Petroleum Exporting Countries (OPEC) in Algiers, Iraq and Iran sign a treaty ending their border disputes.
- **1979 16 July** - President Al-Bakr resigns and is succeeded by Vice-President Saddam Hussein.
- **1980 1 April** - The pro-Iranian Da'wah Party claims responsibility for an attack on Deputy Prime Minister, Tariq Aziz, at Mustansiriyah University, Baghdad.



# Timeline - IRAQ

- **Iran-Iraq War**

- **1980 4 September** - Iran shells Iraqi border towns (Iraq considers this as the start of the Iran/Iraq war).
- **1980 17 September** - Iraq abrogates the 1975 treaty with Iran.
- **1980 22 September** - Iraq attacks Iranian air bases.
- **1980 23 September** - Iran bombs Iraqi military and economic targets.
- **1981 7 June** - Israel attacks an Iraqi nuclear research centre at Tuwaythah near Baghdad.

- **Chemical Attack on Kurds**

- **1988 16 March** - Iraq is said to have used chemical weapons against the Kurdish town of Halabjah.
- **1988 20 August** - A ceasefire comes into effect to be monitored by the UN Iran-Iraq Military Observer Group (UNIIMOG).
- **1990 15 March** - Farzad Bazoft, an Iranian-born journalist with the London Observer newspaper, accused of spying on a military installation, is hanged in Baghdad.



# Timeline - IRAQ

- **Iraq Invades Kuwait**
- **1990 2 August** - Iraq invades Kuwait and is condemned by United Nations Security Council (UNSC) Resolution 660 which calls for full withdrawal.
- **1990 6 August** - UNSC Resolution 661 imposes economic sanctions on Iraq.
- **1990 8 August** - Iraq announces the merger of Iraq and Kuwait.
- **1990 29 November** - UNSC Resolution 678 authorizes the states cooperating with Kuwait to use "all necessary means" to uphold UNSC Resolution 660.
- **1991 16 -17 January** - The Gulf War starts when the coalition forces begin aerial bombing of Iraq ("Operation Desert Storm").
- **1991 13 February** - US planes destroy an air raid shelter at Amiriyah in Baghdad, killing over 300 people.
- **1991 24 February** - The start of a ground operation which results in the liberation of Kuwait on 27 February.



# Timeline - IRAQ

- **Ceasefire**
- **1991 3 March** - Iraq accepts the terms of a ceasefire.
- **1991 Mid-March/early April** - Iraqi forces suppress rebellions in the south and the north of the country.
- **1991 8 April** - A plan for the establishment of a UN safe-haven in northern Iraq, north of latitude 36 degrees north, for the protection of the Kurds, is approved at a European Union meeting in Luxembourg. On 10 April, the USA orders Iraq to end all military activity in this area.
- **1992 26 August** - A no-fly zone, excluding flights of Iraqi planes, is established in southern Iraq, south of latitude 32 degrees north.
- **1993 27 June** - US forces launch a cruise missile attack on Iraqi intelligence headquarters in Al-Mansur district, Baghdad in retaliation for the attempted assassination of US President, George Bush, in Kuwait in April.
- **1994 29 May** - Saddam Hussein becomes prime minister.
- **1994 10 November** - The Iraqi National Assembly recognizes Kuwait's borders and its independence.



# Timeline - IRAQ

- **Oil-For-Food**
- **1995 14 April** - UNSC Resolution 986 allows the partial resumption of Iraq's oil exports to buy food and medicine ( the "oil-for-food program"). It is not accepted by Iraq until May 1996 and is not implemented until December 1996.
- **1995 August** - Saddam Hussein's son-in-law, Gen Hussein Kamil Hasan al-Majid, Minister of Industry and Minerals, as well as Director of the Military Industrialization Organization (MIO), his brother, Saddam, and their families, leave Iraq and are granted asylum in Jordan.
- **1995 15 October** - Saddam Hussein wins a referendum allowing him to remain president for another 7 years.
- **Pardoned son-in-law killed**
- **1996 20 February** - Hussein Kamil Hasan al-Majid and his brother, promised a pardon by Saddam Hussein, return to Baghdad and are killed on 23 February.





# Timeline - IRAQ

- **1996 31 August** - In response to a call for aid from the KDP, Iraqi forces launch an offensive into the northern no-fly zone and capture of Arbil
- **1996 3 September** - The US extends the northern limit of the southern no-fly zone to latitude 33 degrees north, just south of Baghdad.
- **1996 12 December** - Saddam Hussein's elder son, Uday, is seriously wounded in an assassination attempt in Baghdad's Al-Mansur district.
- **1998 31 October** - Iraq ends all forms of cooperation with the UN Special Commission to Oversee the Destruction of Iraq's Weapons of Mass Destruction (Unscom).
- **1998 22 November** - Izzat Ibrahim al-Duri, Vice-Chairman of the RCC, escapes an assassination attempt when visiting Karbala.



# Timeline - IRAQ

- **Operation Desert Fox**
- **1998 16-19 December** - After UN staff are evacuated from Baghdad, the USA and UK launch a bombing campaign, "Operation Desert Fox", to destroy Iraq's nuclear, chemical and biological weapons programs.
- **1999 4 January** - Iraq asks the UN to replace its US and UK staff in Iraq.
- **1999 19 February** - Grand Ayatollah Sayyid Muhammad Sadiq al-Sadr, spiritual leader of the Shi'i sect, is assassinated in Najaf.
- **1999 17 December** - UNSC Resolution 1284 creates the UN Monitoring, Verification and Inspection Commission (UNMOVIC) to replace Unscm. Iraq rejects the resolution.
- **2000 1 March** - Hans Blix becomes executive chairman of UNMOVIC.
- **2000 August** - Reopening of Baghdad airport, followed by a stream of international flights organized by countries and organizations to campaign against sanctions. The flights are labeled humanitarian missions to comply with UN Sanctions.



# Timeline - IRAQ

- **2000** October - Iraq resumes domestic passenger flights, the first since the 1991 Gulf War. Commercial air links re-established with Russia, Ireland and Middle East.
- **2001** - Free-trade zone agreements set up with neighboring countries. Rail link with Turkey re-opened in May for first time since 1981.
- **2001** February - Britain, US carry out bombing raids to try to disable Iraq's air defense network. The bombings have little international support.
- **2001** May - Saddam's son Qusay elected to the leadership of the ruling Ba'th Party, fuelling speculation that he's being groomed to succeed his father.
- **2002** April - Baghdad suspends oil exports to protest against Israeli incursions into Palestinian territories. Despite calls by Saddam Hussein, no other Arab countries follow suit. Exports resume after 30 days.
- **2002** May - UN Security Council agrees to overhaul the sanctions regime, replacing a blanket ban on a range of goods with "smart" sanctions targeted at military and dual-use equipment.



- **Weapons Inspectors Return**
- **2002 September** - US President George Bush tells skeptical world leaders gathered at a UN General Assembly session to confront the "grave and gathering danger" of Iraq - or stand aside as the United States acts.
- **2002 November** - UN weapons inspectors return to Iraq for the first time since 1998, backed by a tough UN Security Council resolution which is reluctantly accepted by Baghdad. The resolution threatens serious consequences if Iraq is in "material breach" of its terms.



# IRAQI Material Unaccounted For



- Nearly four tons of VX nerve agents
- Growth media for 20,000 liters of biological warfare agents
- 15,000 shells for use in biological warfare
- 6,000 chemical warfare bombs
- Nuclear information

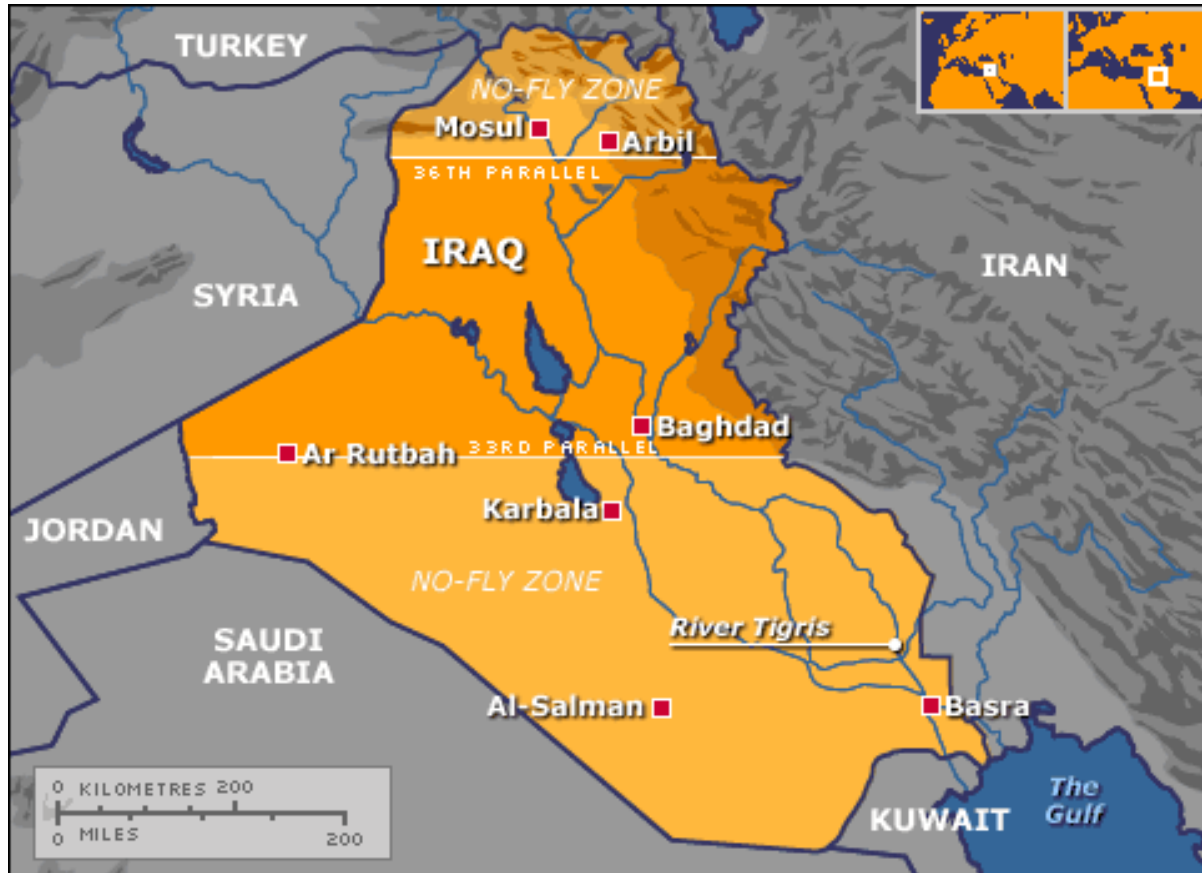
**A DECADE OF DEFIANCE AND DECEPTION**



A DECADE OF DEFIANCE AND DECEPTION

## Key Maps

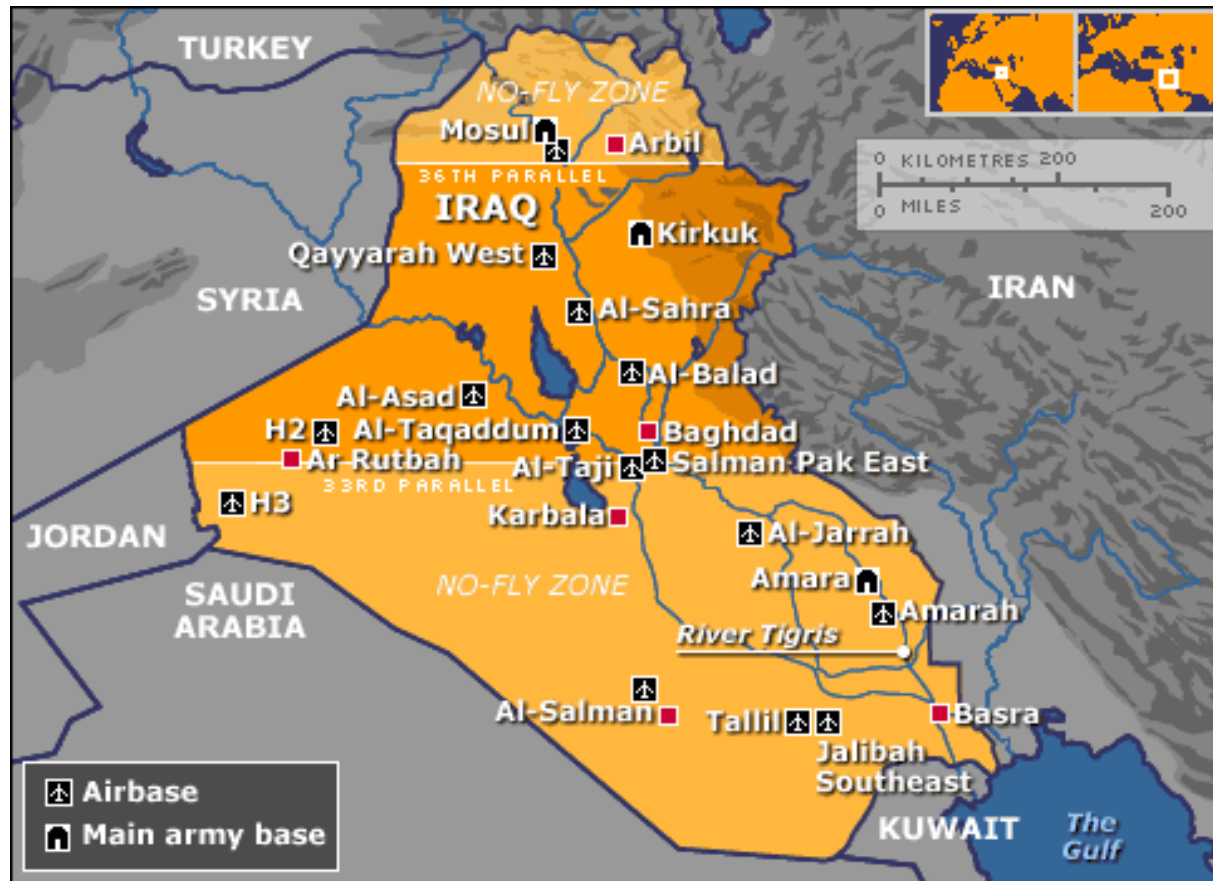
# IRAQ



- Iraq is mostly desert, made up of broad plains. There are reedy marshes along the southern part of its border with Iran, with large flooded areas. Mountains stretch along Iraq's northern borders with Iran and Turkey. 'No-fly zones' were set up to protect minority groups from reprisals by Saddam Hussein after the Gulf War. US and British aircraft continue to patrol them, and mount sporadic raids against Iraqi targets.



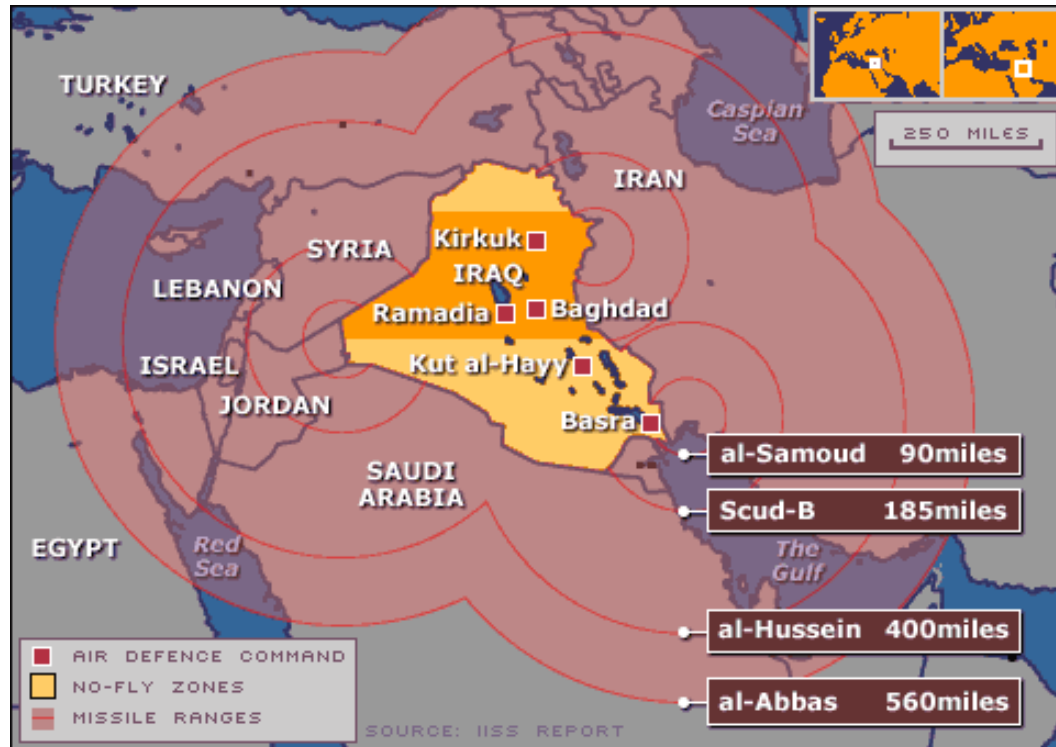
# IRAQI Bases



- Iraq's army is organized into five corps. Iraq has around 375,000 regular troops and some 2,000 tanks, but much of the army's equipment is old and decrepit. The elite Republican Guard is considered to be Iraq's most effective fighting force. Iraq has numerous airbases but like the army, the air force is largely dilapidated and obsolete.



# IRAQI Missile Range



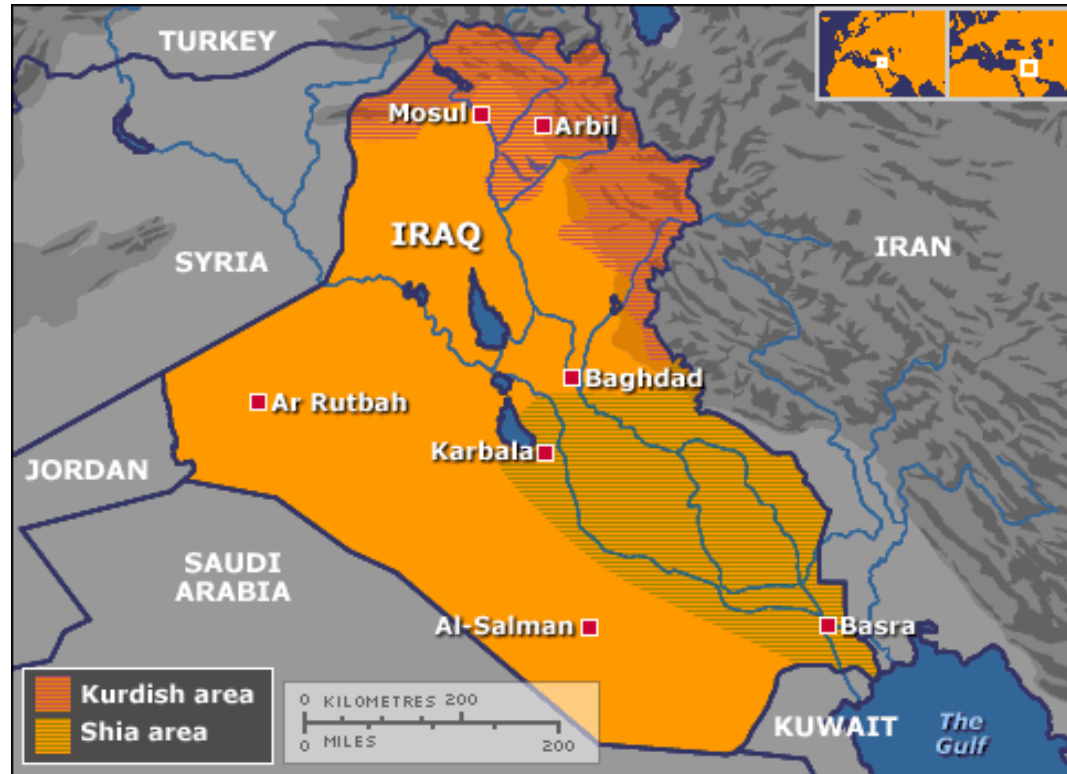
- Iraq is believed to have a small number of 400-mile range al-Hussein missiles. These could strike Israel, Saudi Arabia, Turkey, Iran and Kuwait. Iraq is also thought to have 15 to 80 Scud B missiles, and a few al-Samoud missiles, which could strike Kuwait or other neighboring countries. The al-Abbas missile was developed more than 10 years ago from earlier Scud types, but it is not clear whether it reached operational status.
- None of these are very effective at dispersing chemical or biological weapons, according to the International Institute for Strategic Studies.
- Iraq does not have the facilities to build long-range missiles and would require several years and foreign assistance to do this.

# US Bases



- A number of military bases in the region would be key to an assault on Iraq – if their governments allowed the US to use them for the purpose. Al-Udeid in Qatar is already home to about 1,000 US military personnel and is currently undergoing major expansion. The Pentagon is considering establishing a permanent command centre there, and 600 staff from US Central Command are set to relocate there in November on what is described as an exercise.
- US and British planes already fly from Incirlik in Turkey to patrol the no-fly zone over Northern Iraq.
- The southern no-fly zone is enforced from Prince Sultan airbase in Saudi Arabia, which houses 4,000 US military personnel and an air control centre. There are more than 4,000 troops based in Kuwait, and al-Seeb air base in Oman is used for maintenance and refueling.

# Dissident Areas



- The Kurds in their north of the country and the Shia Muslims in the south are both partly protected by the US-British enforced "no-fly" zones. The Kurds have at times opposed the regime and suffered brutal repression in return. Saddam Hussein used chemical weapons against them when they increased opposition activities during the Iran-Iraq war.
- The two main Kurdish parties have a total of about 40,000 armed forces.
- In the south, Shia Muslims have opposed the regime since the early 1980s, when they were backed by Iran during the Iran-Iraq war. According to some reports, the main militant group has a guerrilla force of between 7,000 and 15,000 men.

# IRAQI Oilfields



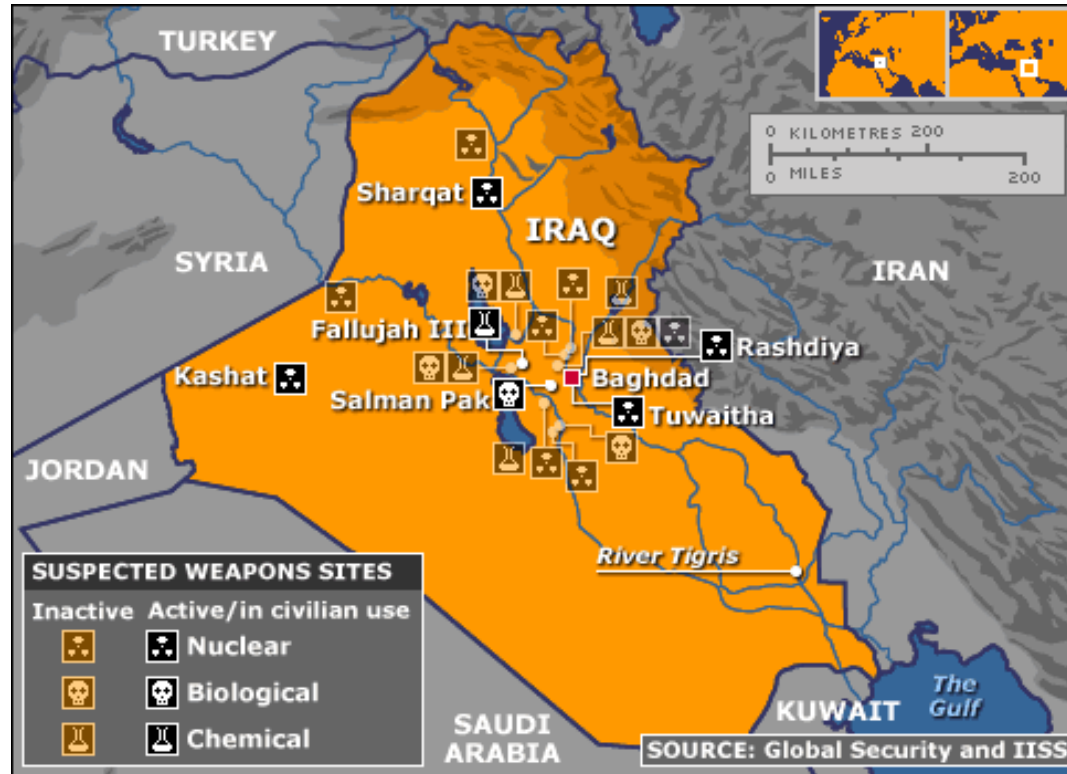
- Iraq's proven oil reserves of 112 billion barrels are the world's second largest, behind Saudi Arabia. Lack of investment and restrictions on imports of machinery and technology have taken their toll on the oil industry - which was also battered during the Gulf War.
- The country has only been allowed to export a limited amount of oil under the UN's oil-for-food program.

# Baghdad



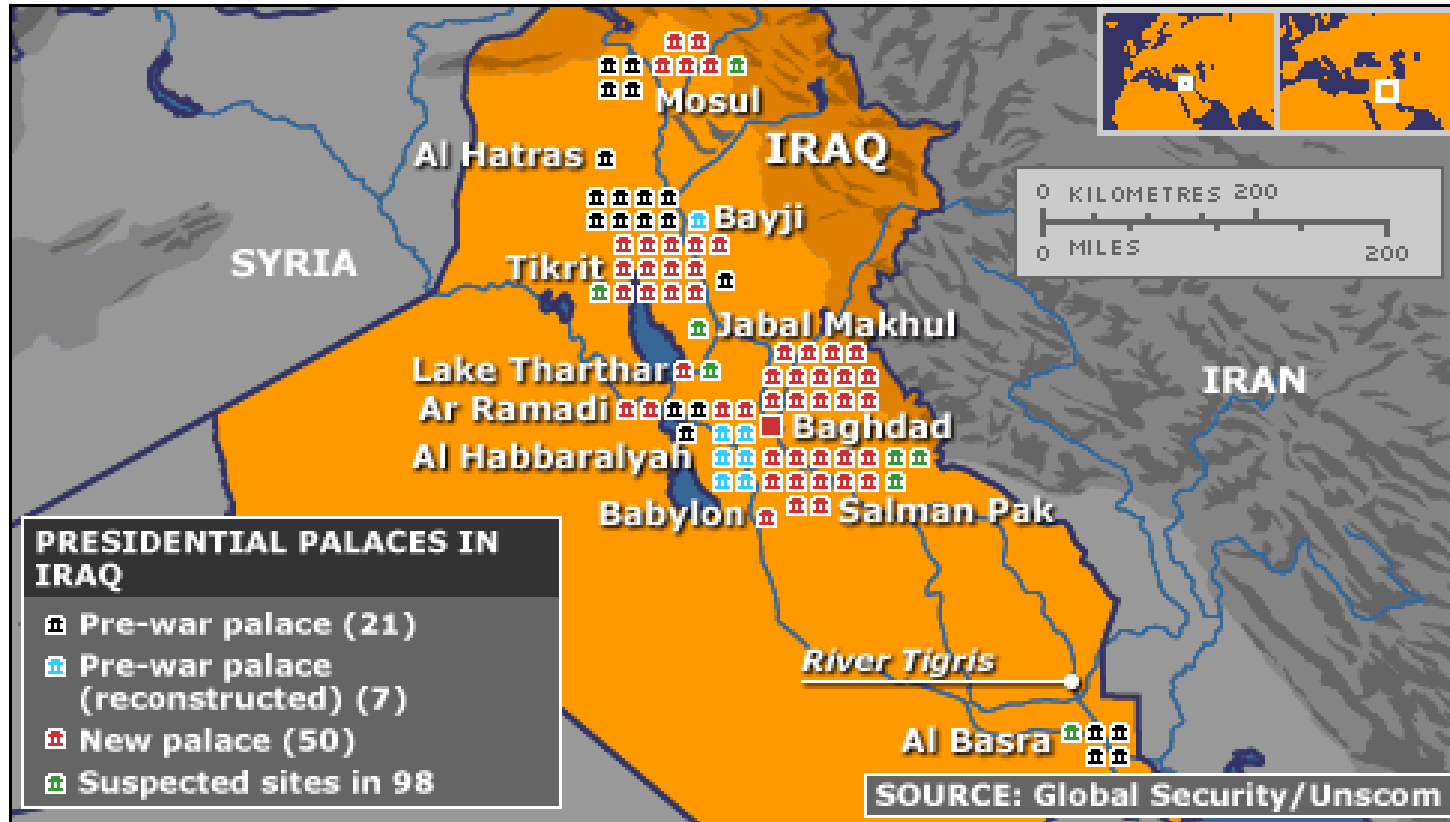
- With a population of nearly 4 million, Baghdad is by far Iraq's largest city, and is growing rapidly. It is also the nerve centre of the regime, and all of the main government ministries and several key military facilities are located there.

# Weapon Sites



- Iraq is believed to have once had extensive chemical, nuclear and biological weapons programs. But the 1991 Gulf War, subsequent UN inspections, international sanctions and raids by US and British aircraft have seriously degraded its facilities. Some sites are still thought to be active, but these may only be used for civilian purposes such as the production of medicines, or non-military research.
- Some analysts believe Iraq to have significant stocks of biological and chemical agents. But others suggest that even if it has, these are now so old they no longer work, and in any case Iraq lacks effective means of delivery.
- A recent report by the International Institute for Strategic Studies concluded that Iraq would require up to a decade and significant help from a foreign power to produce a nuclear bomb.

# Presidential Palaces



- A key concern has been securing full access for UN inspectors to all the so-called "presidential palaces". In 1998, eight presidential palaces were identified as being potential weapons sites. Some of them are huge, and 50 palaces have been built since the last Gulf War, according to Global Security.



A DECADE OF DEFIANCE AND DECEPTION

**Possible Options**  
**For Ousting Saddam Hussein**  
**Attack Options**



# Desert Storm-II



**Strategy:** This would essentially be a replay of the 1991 Gulf War, but on a smaller scale. The air campaign would be more intense than last time round, and ground troops would be deployed faster and in smaller numbers. The main invasion would be launched from Kuwait, while warplanes based in neighboring countries would mount air strikes.

Some analysts say this is the most likely scenario, but that elements of the others are also likely to feature, using propaganda warfare to maximize opposition to the regime from inside Iraq.

**Forces:** Up to 250,000 troops, possibly including 25,000 from UK.

**Drawbacks:** The presence of a large Western force in the region may alarm other Arab states. The long build-up needed to assemble such a force could give Saddam Hussein time to mount a pre-emptive attack, possibly using chemical or biological weapons. It may also be too slow for some in the US administration.

# Inside Out



**Strategy:** This plan, also known as “Baghdad first”, involves a strike at the heart of Saddam Hussein’s regime, aimed at triggering a collapse from within. Key installations in Baghdad and the president’s hometown Tikrit would be seized in an attack that would aim to keep as much of an element of surprise as possible. It would combine focused air strikes with a rapid advance of ground forces to Baghdad.

Bridges and other infrastructure would be avoided to allow invading forces and defecting Iraqi troops to move easily through the country.

**Forces:** Estimates vary from 25,000 to 100,000 troops.

**Drawbacks:** Fighting would be likely to centre in and around Baghdad. The Iraqi leader reportedly wants to encourage fighting in cities, as casualties are likely to be high, and Iraqi troops – particularly the Special Republican Guard – have an advantage in urban warfare.

# Rolling War



**Strategy:** This tactic would see large numbers of troops seize and establish bridgeheads in the north, west and south of Iraq. These zones would be used to rally local dissident groups, with the aim of exerting severe pressure on Saddam Hussein's regime and hastening its collapse.

This scenario would have similarities to the US campaign in Afghanistan, and would in theory avoid a direct assault on Baghdad.

**Allies:** The Kurds in the north (whose forces may number about 85,000) and Shia Muslims in the south.

**Drawbacks:** Significant numbers of troops - about 250,000 American and 15,000 British soldiers - would be needed. The Iraqi opposition is also weak and splintered, and the Iraqi Government strongly entrenched in the areas of Iraq that it controls. It is not clear whether the Kurds and Shias would support such a plan. If they did, they might also demand their own state as a reward, risking the break-up of Iraq.

# Coup



**Strategy:** Another suggested option is a surprise military coup backed financially and tactically by the CIA. Key installations in Baghdad would be seized, while a US air campaign could attack military targets such as the Republican Guard armored divisions around Baghdad.

**Drawbacks:** Several failed coup attempts by disaffected military officers since 1991 have been met with bloody retribution. It may be difficult to persuade dissidents to risk their lives again.

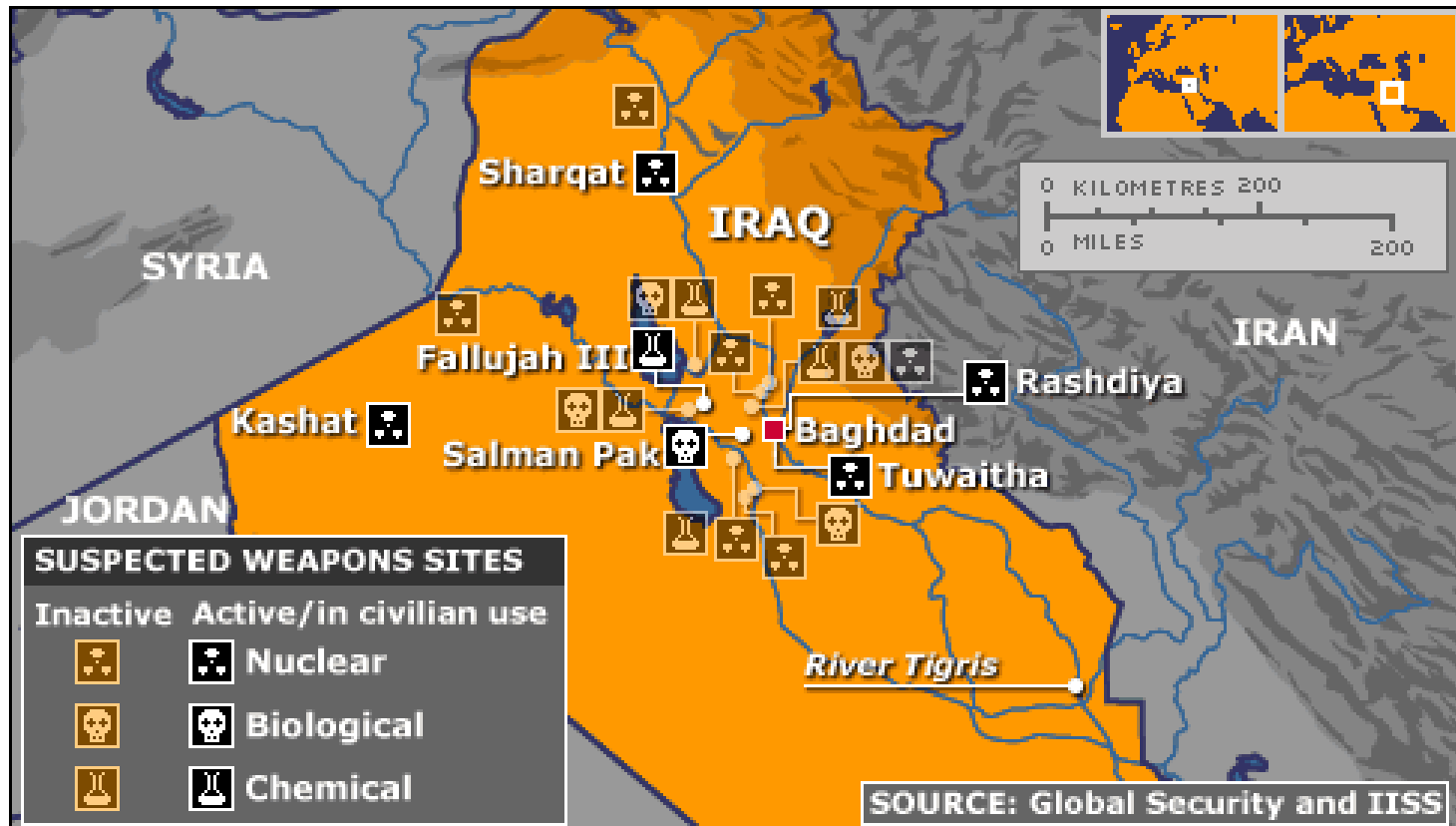
However, an element of internal dissent – possibly culminating in a coup – is likely to play a part if the US invades, and it becomes clear that it is going to win.



A DECADE OF DEFIANCE AND DECEPTION

# **IRAQ'S Suspected Weapons Sites**

# Major Sites



- Many of Iraq's weapons programs have been halted by UN inspections, sanctions and air raids. But some sites are still thought to be active - although they may only be used for civilian purposes.



A DECADE OF DEFIANCE AND DECEPTION

# **IRAQ'S**

## **Chemical, Biological & Nuclear Weapons**

# Chemical Weapons

## Introduction



**GAS**

- Iraq has admitted to manufacturing the chemical agents mustard gas, VX, sarin and tabun before the 1991 Gulf War, although much of this has been destroyed by UNSCOM inspectors.
- However, intelligence estimates that 360 tones of chemical warfare agent remain unaccounted for – and that Iraq could produce mustard gas within weeks and nerve agents such as VX, tabun and sarin within months.
- Iraq says anything that has not been destroyed will have degraded beyond use by now.



# Chemical Weapons

## Mustard Gas



**GAS**

- **Mustard gas:** 'Mustard' is liquid at room temperature, but is more commonly used in its gas form - which has a strong smell likened to horseradish or garlic.
- **Absorption:** Contact with skin or inhalation
- **Effects:** Mustard gas is a blistering agent, burning eyes and skin exposed to it and lungs, mouth and throat if it is inhaled. It is not normally lethal, but can cause cancer and serious disfigurement.
- **Symptoms:** Conjunctivitis, skin burns, throat pain, cough and susceptibility to infection and pneumonia. Symptoms are not usually noticed until 1 - 6 hours after exposure.
- **Protection:** Protective clothing and early decontamination, followed by antibiotics.
- **Iraqi program:** Iraq has admitted making 2,850 tonnes of mustard gas, has filled bombs with it and used it against Kurds at Halabja in 1988.

# Chemical Weapons

## VX



**GAS**

- **VX:** A clear, colorless liquid – technically named methylphosphonothioic acid and described as the most deadly nerve agent ever created.
- **Absorption:** Through eyes, lungs and skin
- **Effects:** Like other nerve agents, VX attacks the nervous system – severe doses can cause death within 15 minutes of exposure.
- **Lethal dose:** Fraction of a drop
- **Symptoms:** Small doses trigger nasal discharge, chest tightness, wheezing and headaches – severe doses lead to convulsions, confusion and respiratory failure.
- **Protection:** Immediate injection of atropine
- **Iraqi program:** Iraq has admitted making 3.9 tonnes, including 1.5 tonnes which the UK says remain unaccounted for. Also unaccounted for are 300 tonnes of a chemical which Iraq had used only for the production of VX. VX was used in the Iraqi attack on the Kurds at Halabja and traces of it have also been found on remnants of ballistic missile warheads.

# Chemical Weapons

## Sarin



**GAS**

- **Sarin:** A colorless liquid several times more deadly than cyanide, sarin is related to a group of pesticides and was initially developed in Germany in the 1930s.
- **Effects:** Sarin attacks the nervous system when inhaled or absorbed through the skin. Inhalation can cause death within 1 - 10 minutes of exposure.
- **Lethal dose:** 0.5 milligrams
- **Symptoms:** Pupils shrink to pinpoints and sweating and twitching precede symptoms similar to those for VX exposure.
- **Protection:** Injection of antidote immediately after contact.
- **Iraqi program:** Iraq has admitted to manufacturing 795 tonnes of sarin, filling bombs with it and developing ballistic missile warheads to deliver it. Iraq used sarin against Iranian troops during the Iran-Iraq war, and against Kurds at Halabja in 1988.

# Chemical Weapons

## Tabun



**GAS**

- **Tabun:** Also known as GB, tabun was discovered in Germany by Dr Gerhard Schrader, who also first developed sarin.
- **Effects:** If inhaled or absorbed through the eyes or skin, tabun can kill in as little as one or two minutes.
- **Symptoms:** Similar to VX and sarin.
- **Protection:** Injection of antidote immediately after contact.
- **Iraqi program:** Iraq has admitted to producing 210 tonnes of tabun and using the agent to fill bombs. A UN-backed team has confirmed that Iraq used tabun as early as 1984 against Iranian forces. Tabun was also used in the Iraqi attack on Kurds at Halabaja in 1988.

# Biological Weapons

## Introduction



- Intelligence says Iraq is currently able to produce the biological agents anthrax, botulinum toxin, ricin and aflatoxin.
- Iraq has admitted to manufacturing all of these before the 1991 Gulf War, but says it has since destroyed all stocks.
- Intelligence services maintain that Iraq could still produce biological agents within weeks.

**BIO**

# Biological Weapons

## Anthrax



**BIO**

**Anthrax:** A disease caused by the bacteria bacillus anthracis, which is found in soil and sometimes carried by animals.

**Spread:** Anthrax develops differently depending on whether the spores enter the body through cuts in the skin, in contaminated food or by inhalation.

**Effects:** Inhalation and intestinal anthrax frequently kill their victims. Untreated skin anthrax can lead to blood poisoning, which can also kill.

**Symptoms:** Inhalation anthrax has flu-like symptoms, intestinal anthrax has symptoms similar to food poisoning, skin anthrax starts with lesions.

**Lethal Amount:** One billionth of a gram

**Protection:** Can be treated with antibiotics. A vaccine is available.

**Iraq's program:** Iraq has admitted making 8,500 liters and filling bombs and ballistic missile warheads with this. The UK says enough growth medium to produce another 25,000 liters is unaccounted for.

# Biological Weapons

## Botulism



**BIO**

**Botulism:** A disease caused by botulinum nerve toxin – produced by clostridium botulinum bacteria.

**Spread:** Via wounds on the skin, or through contaminated food supplies.

**Effects:** Toxins disrupt nerve system causing muscle paralysis, leading to possible death by suffocation within hours or days.

**Symptoms:** Blurred double vision, nausea, vomiting, muscle weakness leading to paralysis.

**Lethal Amount:** One billionth of a gram

**Protection:** Can be treated with anti-toxin injection.

**Iraq:** Iraq has admitted making 19,000 liters of botulinum toxin and filling bombs and ballistic missile warheads with it.

# Biological Weapons

## Ricin



**BIO**

**Ricin:** Natural toxin derived from castor beans.

**Spread:** By inhalation or ingestion

**Effects:** When inhaled, ricin breaks down lung tissue and can kill within 36 - 72 hours. It can also be fatal when ingested, with death usually occurring at least three days after exposure.

**Symptoms:** Fever, chest tightness, cough, nausea and joint pain if inhaled; nausea, vomiting, abdominal cramps and severe diarrhea if ingested.

**Protection:** No vaccine or anti-toxin available

**Iraqi development:** Unscm inspectors say they have found evidence that Iraq produced ricin. Some reports say Iraq carried out a weapons test with ricin, but abandoned production when it was unsuccessful. There is concern that a castor oil plant at Fallujah which has been rebuilt in recent years may be linked to ricin manufacture.



# Biological Weapons

## Aflatoxin



**Aflatoxin:** Fungal toxins, sometimes found in grain or nuts

**Spread:** Food contamination or inhalation of aerosolized form

**Effects:** Aflatoxin is generally considered non-lethal, but is known to cause liver cancers which may not occur for many years after exposure to the toxins.

**Iraqi development:** Iraq has admitted producing 2,200 liters of aflatoxin, and using some of it to fill bombs and ballistic missile warheads.

**BIO**

# IRAQI Nuclear Weapons Related Facilities

## Construction At Three Iraqi Nuclear Weapons-Related Facilities



- **Al Furat Manufacturing Facility, Iraq**
- Construction of the building depicted on this graphic was suspended in 1991. Construction resumed in 2001, and the building appears to be operational, although the tall section at the rear of the building has not been completed.
- The building was originally intended to house a centrifuge enrichment cascade operation supporting Iraq's uranium enrichment efforts.

ATO  
M

# IRAQI Nuclear Weapons Related Facilities

## Construction At Three Iraqi Nuclear Weapons-Related Facilities



- **Nassr Engineering Establishment Manufacturing Facility, Iraq**
- The graphics illustrate the 1998 destruction (during Operation Desert Fox) and subsequent reconstruction of machining buildings assessed to be capable of producing precision components for centrifuges and missiles.
- This machine plant produced centrifuge and EMIS components for Iraq's nuclear weapons program prior to Desert Storm, according to the IAEA.

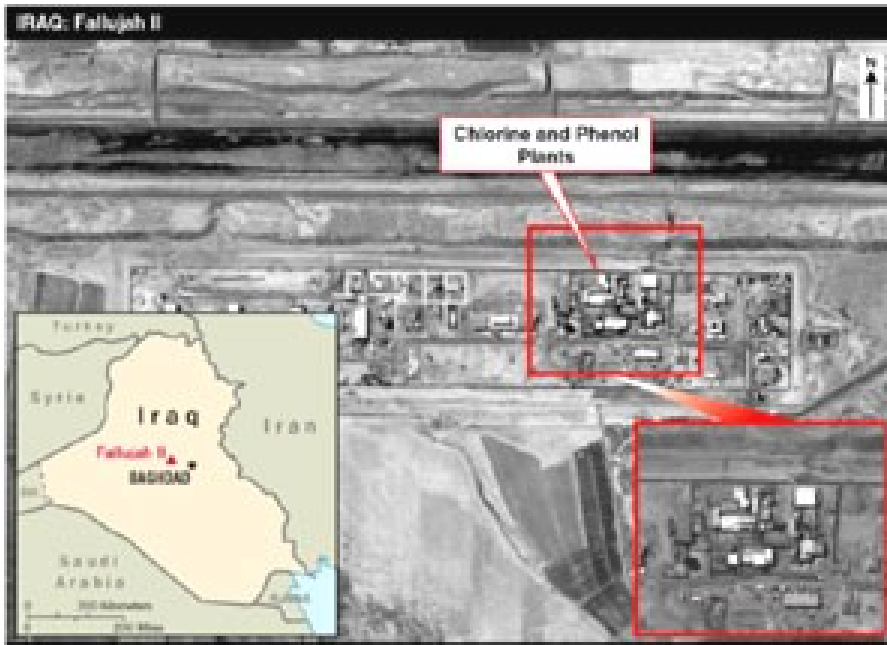
**ATOM**

# IRAQI Nuclear Weapons Related Facilities

## Construction At Three Iraqi Nuclear Weapons-Related Facilities

- **Fallujah II**

- Fallujah II -- located just northwest of Baghdad -- was one of Iraq's principal CW precursor production facilities before the Gulf War. In the past two years, Iraq has upgraded the facility and brought in new chemical reactor vessels and shipping containers with a large amount of production equipment and expanded chlorine output far beyond pre-Gulf war production levels -- capabilities that can be diverted quickly to CW production.



**ATO  
M**

# Ballistic Missiles

- Iraq is believed to be developing ballistic missiles with a range greater than 150 kilometers - as prohibited by the UN Security Council Resolution 687.
- Discrepancies identified by UNSCOM in Saddam Hussein's declarations suggest that Iraq retains a small force of Scud-type missiles and an undetermined number of launchers and warheads.
- Iraq continues work on the al-Samoud liquid propellant short-range missile (which can fly beyond the allowed 150 kilometers). The al-Samoud and the solid propellant Ababil-100 appeared in a military parade in Baghdad on December 31, 2000, suggesting that both systems are nearing operational deployment.
- The al-Rafah-North facility is Iraq's principal site for testing liquid propellant missile engines. Iraq has been building a new, larger test stand there that is clearly intended for testing prohibited longer-range missile engines.
- At their al-Mamoun facility, the Iraqis have rebuilt structures that had been dismantled by UNSCOM that were originally designed to manufacture solid propellant motors for the Badr-2000 missile program.



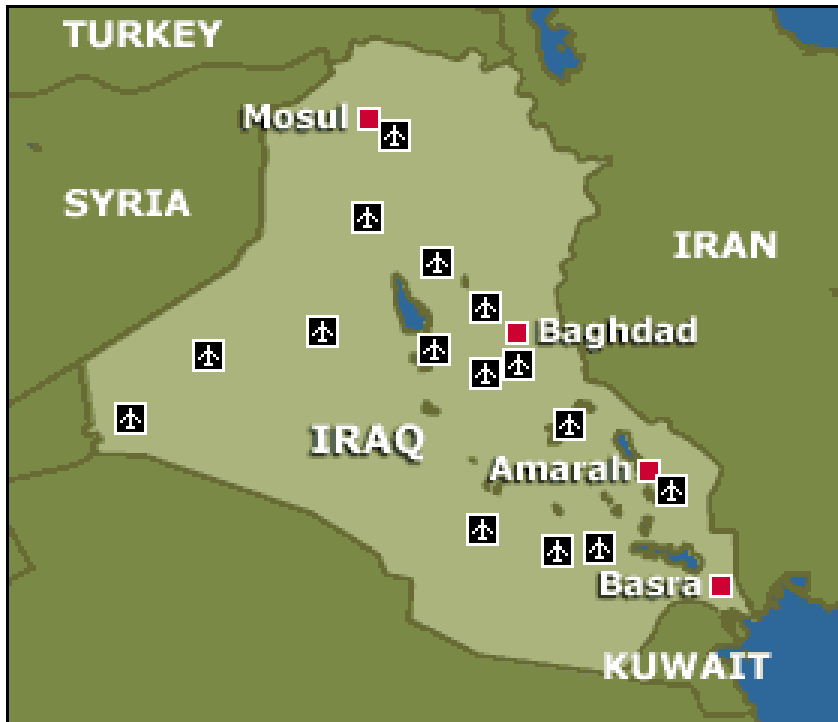
A DECADE OF DEFIANCE AND DECEPTION

# **Military Balance**

20 December, 2002

# IRAQ

## Air Force



- Iraq has few modern aircraft and only a handful of helicopters.
- Its pilots are poorly trained.
- It has a range of missiles with which it could strike neighboring countries.
- However analysts suggest these are unlikely to be able to deliver chemical or biological warheads very effectively.

# IRAQ

## Army



- Iraq has around 375,000 regular troops divided into five main corps.
- Iraq has some 2,000 tanks and other armored vehicles, but many are old and in poor shape.
- Years of war, US and British bombing and international sanctions have left Iraq's military infrastructure in tatters.



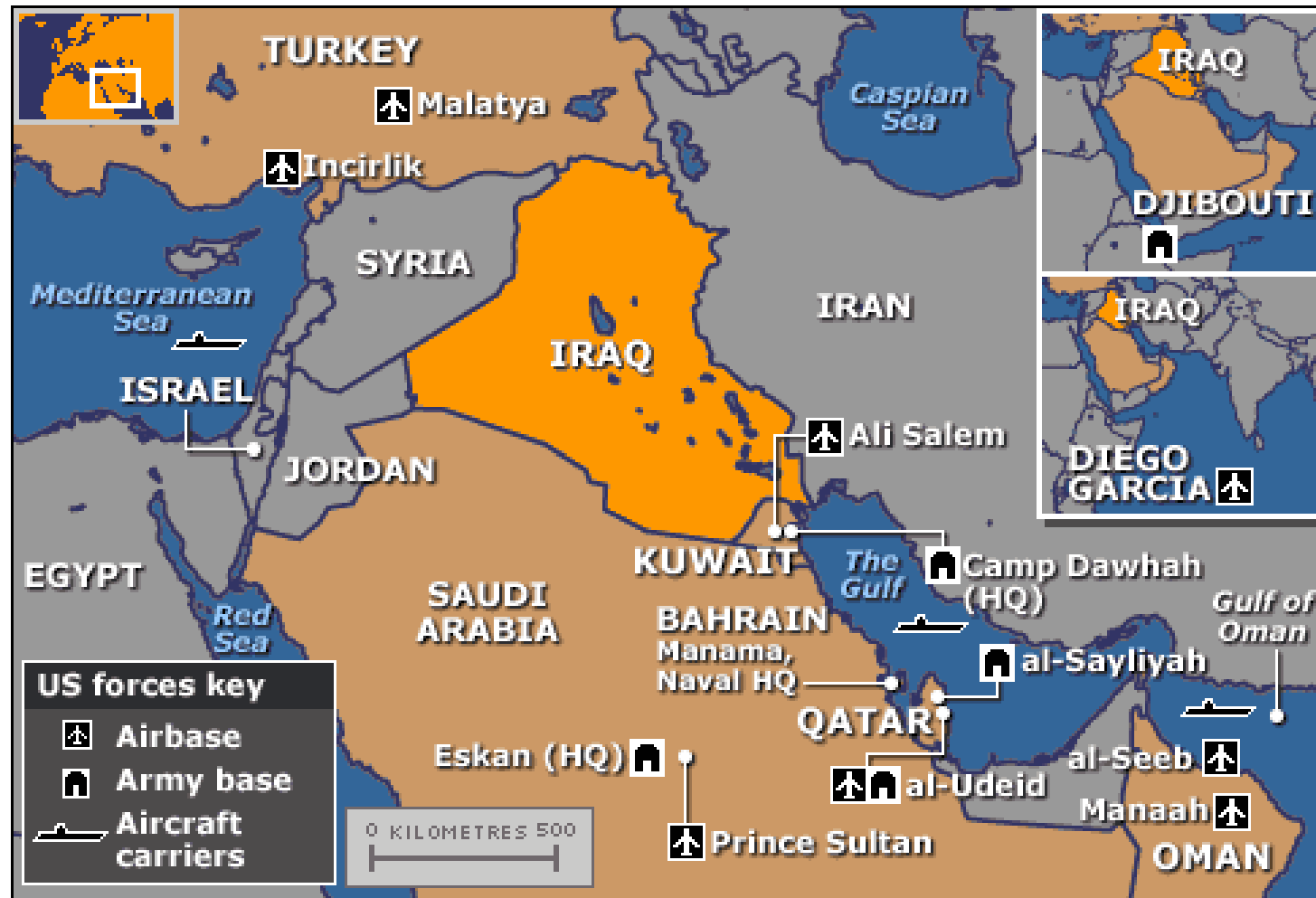
# IRAQ

## Republican Guard

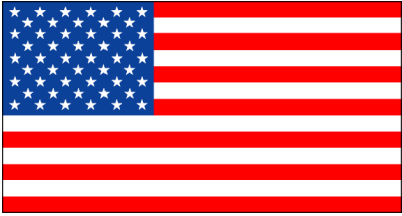


- The 60,000-strong Republican Guard is made up of infantry, motorized infantry, and armored divisions.
- Considered Iraq's best fighting force its elite units are made up almost entirely of volunteers loyal to Saddam Hussein.
- Recruits receive bonuses and are usually better paid and more highly trained than their regular army counterparts.
- The force's equipment includes T-72 tanks with night vision technology.

# Key US Regional Bases



Around 13,000 US personnel are based in Kuwait. Washington is also building up its forces in Djibouti, Saudi Arabia and Qatar

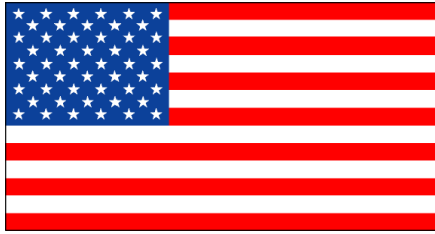


# UNITED STATES



- [Naval Forces](#)
- [Turkey](#)
- [Kuwait](#)
- [Qatar](#)
- [United Arab Emirates](#)
- [Saudi Arabia](#)
- [Oman](#)
- [Djibouti](#)
- [Diego Garcia](#)

Click on the hyperlinks in the list to learn more



# US Naval Forces

- Three aircraft carrier battle groups are within striking range of Iraq. The USS Harry S Truman is heading to the Mediterranean Sea to replace the USS George Washington.
- The USS Constellation is in the Indian Ocean, and the USS Abraham Lincoln is in the Gulf.
- Around 25,000 personnel and 75 warplanes are stationed aboard each carrier. Each ship is accompanied by half a dozen cruisers, destroyers and submarines equipped with Tomahawk cruise missiles.



Last Viewed



Previous



Next



# Turkey

- The US wants to position large numbers of ground forces in Turkey, who would sweep into Iraq to secure the huge oilfields in the north of the country.
- Turkey would also be vital to any air campaign.
- About 1,700 air force personnel and some 60 aircraft are based in Turkey, mainly at Incirlik air base, which serve as the operation centre for patrols enforcing the northern 'no-fly zone'.



Last Viewed



Previous



Next



# Kuwait

- Around 10,000 US troops are already in the country.
- A new \$200bn state-of-the-art army base, Camp Arifjan, is being built south of Kuwait City to replace the current centre of operations, Camp Doha.
- Tanks and equipment for two armored brigades are already in Kuwait. Equipment for a third brigade is steadily arriving.
- About 80 aircraft are stationed at the Ali Salem air base as well as two Patriot missile interception batteries.



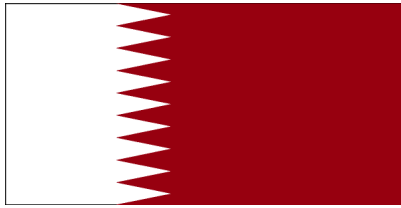
Last Viewed



Previous



Next



# Qatar

- Around 1,000 military personnel, including senior General Tommy Franks, arrived in early December to begin a series of exercises.
- About 3,300 US troops are based at the rapidly expanding al-Udeid base.
- Enough pre-positioned equipment for an armored brigade is deployed in Qatar.



Last Viewed



Previous



Next



# United Arab Emirates

- There are about 500 mostly air force personnel in the United Arab Emirates.
- Refueling aircraft for planes patrolling the southern no-fly zone operate from Al-Dhafra air force base.



Last Viewed

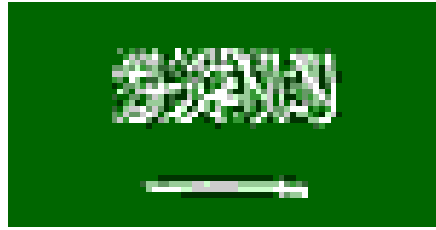


Previous



Next





# Saudi Arabia

- Around 6,600 personnel, mainly from the air force, form the bulk of the US forces in Saudi Arabia.
- Prince Sultan base in Riyadh serves as an air operations centre, and is likely to play a key part in any attack.
- Two US Patriot missile batteries are also based in Saudi Arabia to protect against a possible Iraqi missile attack.



Last Viewed



Previous



Next



# Oman

- Some 2,000 air force personnel and 24 aircraft are deployed in Oman at the al-Seeb air base, which is mainly used for maintenance and refueling.
- In addition, three US Air Force sites hold support equipment for 26,000 personnel, as well as equipment and fuel to maintain three air bases.



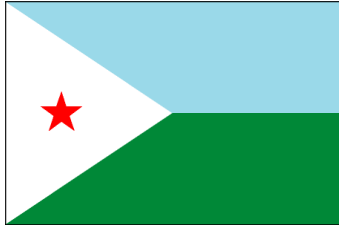
Last Viewed



Previous



38 Next



# Djibouti

- Around 3,000 US Special Forces, Marines and Air Force personnel are establishing a base in Djibouti with the aim of tracking down Al-Qaeda members operating in Yemen and Somalia.
- A high-tech command and control ship, the USS Mount Whitney, is coordinating the movement of troops and equipment.
- Analysts say these forces could easily be diverted into the Gulf to join an attack on Iraq.



Last Viewed



Previous



Next

# Diego Garcia

- The British-owned Indian Ocean island is home to a fleet of US B-2 stealth bombers, which are expected to spearhead any bombing campaign against Iraq.
- A number of older B-52 bombers, fitted with laser-guided smart bombs, are also based on the island.
- Seventeen ships loaded with tanks and other equipment for ground forces are anchored at Diego Garcia.



Last Viewed



Previous



Next

# Human Rights In Saddam's IRAQ



Shi'a prisoners executed during the 1991 insurrection in southern Iraq.



An Iraqi Kurdish refugee carries his daughter across a footbridge over the Tigris River to Turkey, 1991.



Iraqi child victims of one of Saddam's chemical weapons attacks.

# Our Resolve

Americans seek peace in the world. War is the last option for confronting threats. Yet the temporary peace of denial and looking away from danger would only be a prelude to a broader war and greater horror. America will confront gathering dangers early. By showing our resolve today, we are building a future of peace.

**President George W. Bush**





A United States Marine watches the sun set, during an exercise in the Kuwaiti desert, near the western border with Iraq, Thursday, December 19, 2002.